

"The textile industry can use solar power as an option to mitigate the power crisis"

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Energetica India, the Official Media Partner, continued with its LIVE Updates from conferences; "Solar Energy Investment & Technology Forum"; held in Coimbatore on 9th April 2013.

nergetica India was the Official Media Partner "Solar Energy Investment & Technology Forum"; held in Coimbatore on 9th April 2013.

The Summit focused on Tamil Nadu Solar Energy Policy 2012 and looked at understanding the:

- The regulatory aspects of the policy
- Incentives and other benefits given by the government
- Alternate methods to fulfil the solar energy requirements of your company
- Understanding if solar energy can be used for industrial purpose
- Investment and finance requirements for generating solar energy
- Cheaper options to generate electricity

M. Sudarshan, Manager, Consulting, Energy & Resources, Deloitte Touche Tohmatsu India Private Limited

Mr.Sudarshan discussed the use of solar

energy to overcome the current challenges in electricity inadequacy.

He said that most renewable energy in Tamil Nadu comes from wind, with 13% generation, but solar is just picking up.

There are other sources like basgasse, biomass, but the current focus of the State is to push solar energy.

The 2012 solar policy in Tamil Nadu focuses on decentralized production, incentives and supports small systems. Effective implementation is crucial to make this happen.

TANGEDCO invited proposals for allocation of 1000 MW of under the Tamil Nadu solar policy. 92 applications were submitted for 104 projects amounting to 499 MW.

Given the power deficit scenario now in the State, industries should look at renewable here

Textiles and automotive are key indus-

tries in Coimbatore. The textile industry can use solar power and it could be the option to mitigate the power crisis.

The heat needed for finishing, spinning and weaving, which consumes most of the energy, can be done through solar.

As an example Mr.Sudarshan spoke about one Mr.Jayakumaran, an entrepreneur, from Tirupur, who runs an entire textile plant on solar.

Deepak Krishnan, Manager, Consulting, Energy & Resources, Deloitte Touche

Tohmatsu India Private Limited

Mr. Deepak Krishnan spoke about the demand supply problem that solar will be expected to solve. In FY 2013, peak deficit was 30% in Tamil Nadu and this is proving to be a big concern for industrial players.

The state generation utilities have

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power crunches and TANDEGCO has been ranked as "B"- below average operational and functional performance.

U. Rameshkumar, General Manager, Canara Bank, Coimbatore

Mr. Rameshkumar presented financial options on solar applications for electricity and water heating.

He said that people who are eligible for finance include salaried individuals, institutions, associations, etc. 80% of the project cost will be the capital subsidy and it will offered by the bank. The contribution from promoter is only 20%.

In the current market scenario, rate of interest for solar heater is 12.25% and for industrial and commercial power is 13 25%

One can avail soft loans at 5% interest rate. However, you cannot have subsidies if you avail soft loan. Repayment period is 3-5 years.

Manu Karan, Head, Distributed Generation (India), Sun Edison

Mr. Karan said that the core value of Sun Edison is to develop lowest cost of energy. In India they have done 78MW+ projects.

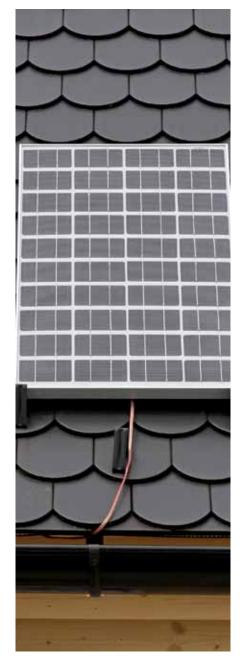
Sun Edison is also involved in off-grid solar business with different models. So if a power consumer can look at either buying equipments from Sun Edison or take a system on lease.

Mr. Karan spoke about a case study in Madurai which faces 10-14 hours of power cuts. The area also has low voltage issues. A commercial plant in the area installed a 20kW solar plant. The solar power planted generated close to 100 units per day; with the excess power going back to the grid.

He said that a solar power plant needs to be run like a military camp to avoid cow grazing, stone pelting on panels, etc. These are common challenges as in India, as most of the land available for solar would be remotely located, which is why the land price is low.

Sudeep Jain, Chairman & **Managing Director, Tamil Nadu Energy Development Agency**

Last year, in October, since the launch of the Solar Policy, there has been a phenomenal response from the industries in Tamil Nadu.



This session will be interactive with active questions and participation from people present here.

Krishnan Arun, Head, Business Development, Waaree Energies.

Mr. Krishnan said that the solar opportunity in India is immense. Even though we have more than 2 GW installed as of now, more than

300 million Indians do not have access to power. So the use of solar to help these people will be more important.

On the Tamil Nadu's Solar Policy, he said that the most important aspect is the Solar Purchase Obligation for captive utilities. However, the challenges would be on

land and evacuation.

P Jayakumar, Founder and CEO, **Arbutus Consultants Pvt Ltd.**

Mr.Jayakumar spoke on the aspects that need to be understood while solar option is considered by power consumers.

A good amount of roof is available in Coimbatore and roof top solar can be installed here.

Once upon a time, solar was totally ignored due to high costs and new technology; but today solar is being embraced slowly and is expected to go far more ahead.

For power consumers looking at solar, the fist step is to do an energy audit to find how much power is being consumed. Solar Power System is to be chosen based on the power need.

A solar system can be combined with another source of power, a diesel genset or wind turbine or AC grid to ensure consistent power supply. There could also be a standalone system or inverter with provision feed in grid at a later stage. The inefficiencies of intermediate systems like battery, inverter also needs to be considered while designing the solar system.

One must also look at reducing power needs as much as possible.

Dr Keith Love Grove, Head, Solar Thermal, IT Power Australia

Dr. Grove said that there are a few hotspots in Tamil Nadu where CSP can be used.

CSP with storage offers potential lowering of cost of energy, it can match peak demand and our economic performance improves. It can give ancillary services in spinning/non spinning reserve, give voltage control.

So maybe CSP can be the next big thing.

Dr.Grove also spoke about how wind farms tie up more land and these very areas of wind development have quite good scope of using Solar PV. So co-locating wind and solar can reduce average variability.

Dr. Grove also spoke on the upcoming space of "Solar driven AC". There are a few options here. One being solar thermal driven absorption chillers, and also PV driven conventional vapour compression chillers.

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